



Knowing the Code

Information Technology occupations are some of the most in-demand occupations in Missouri. Computer and Mathematical occupations employed more than 80,000 people with an average wage of \$83,150 in 2021 (2021 Occupational Employment and Wage Statistics estimates). Employment in Information Technology occupations is projected to grow by 14.2 percent from 2020-2030 (MERIC Long-Term Employment Projections).

From Feb. 1, 2022, to Jan. 31, 2023, there were over 76,000 online job ads for Computer and Mathematical occupations (Lightcast). Software development and programming skills are highly valued in these occupations. The majority of job ads for these occupations requested proficiency in various computer programming languages. The top requested programming languages include SQL, Java, and Python. These language skills are also most commonly found in job ads for Software Developers and Computer Systems Analysts.

Top 20 Software and Programming Skills Requested in IT Occupations

| Skill | Skill Cluster | Online Job Ads |
|---------------------------------------|----------------------------------|----------------|
| SQL | SQL Databases and Programming | 17,650 |
| Software Development | Software Development Principles | 13,590 |
| Java | Java | 12,320 |
| Software Engineering | Software Development Principles | 11,250 |
| Python | Scripting Languages | 11,130 |
| JavaScript | JavaScript and jQuery | 8,440 |
| Linux | Operating Systems | 7,090 |
| Oracle | Oracle | 6,840 |
| Scrum | Software Development Principles | 6,510 |
| Git | Version Control | 5,810 |
| Microsoft C# | Microsoft Development Tools | 5,570 |
| Atlassian JIRA | Software Quality Assurance | 5,300 |
| Agile Development | Software Development Principles | 4,630 |
| Microsoft Azure | Cloud Solutions | 3,830 |
| SQL Server | SQL Databases and Programming | 3,750 |
| Debugging | Programming Principles | 3,560 |
| Systems Development Life Cycle (SDLC) | System Design and Implementation | 3,510 |
| UNIX | Operating Systems | 3,020 |
| .NET | Microsoft Development Tools | 3,000 |
| Extensible Markup Language (XML) | Extensible Languages | 2,970 |

Source: Lightcast, online job ads Feb. 1, 2022 – Jan. 31, 2023

Who's Hiring?

| Top Industries | | |
|----------------|--|--------------|
| NAICS Code | Industry Title | Job Postings |
| 541 | Professional, Scientific, & Technical Services | 9,240 |
| 336 | Transportation Equipment Manufacturing | 4,570 |
| 523 | Securities, Commodity Contracts, & Other Financial Investments | 4,310 |
| 524 | Insurance Carriers & Related Activities | 4,020 |
| 522 | Credit Intermediation & Related Activities | 3,200 |
| 611 | Educational Services | 2,130 |
| 622 | Hospitals | 1,480 |
| 511 | Publishing Industries (except Internet) | 1,190 |
| 325 | Chemical Manufacturing | 1,020 |
| 928 | National Security & International Affairs | 1,000 |

Source: Lightcast, online job ads Feb. 1, 2022 – Jan. 31, 2023

Top Employers

Edward Jones
The Boeing Company
Deloitte
General Dynamics
MasterCard Worldwide
Charter Communications
Centene Corporation
Humana
Wells Fargo
Accenture

Source: Lightcast, online job ads Feb. 1, 2022 – Jan. 31, 2023

Industries with the most job postings for Information Technology occupations included *Professional, Scientific, and Technical Services*, and *Transportation Equipment Manufacturing*. The employer with the most job postings was Edward Jones, followed by Boeing and Deloitte.

Skill Profile

Software Engineering is the detailed study of engineering used to design, develop, maintain, test, and evaluate computer software. It heavily uses software configuration management, which is about systematically controlling changes and maintaining the integrity of the configuration and code throughout the system life cycle. Software Engineering is most commonly requested in job ads for *Software Developers*, and *Computer Systems Engineers and Architects*. Employers requesting software engineering in job ads include Boeing and MasterCard.

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Data accessed February 2023.

